

20  
Feb 05

# A L E R T P E R I O D S The International Space Environment Service

FEBRUARY 2005

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location		Flares			Date of Fcst	Region Fcst(1)	Geoadvice(1)
							Lat	Lon	Opt	M	X			
032	01	31	49	86	18	10727	S09	W53	0	0	0	01	Q	SOL: Quiet
						10728	S11	W12	0	0	0	01	Q	MAG: Active
						10729	S10	E18	0	0	0	01	Q	PRO: Quiet
033	02	01	27	84	6	10727	S09	W68	0	0	0	02	Q	SOL: Quiet
						10729	S08	E06	0	0	0	02	Q	MAG: Quiet
									0	0	0	02		PRO: Quiet
034	03	02	28	82	8	10727	S08	W84	0	0	0	03	Q	SOL: Quiet
						10729	S10	W10	0	0	0	03	Q	MAG: Quiet
									0	0	0	03		PRO: Quiet
035	04	03	23	83	9	10727	S10	W97	0	0	0	04	Q	SOL: Quiet
						10729	S11	W25	0	0	0	04	Q	MAG: Quiet
									0	0	0	04		PRO: Quiet
036	05	04	22	82	2	10729	S11	W39	0	0	0	05	Q	SOL: Eruptive
						10730	S20	E73	0	0	0	05	Q	MAG: Quiet
									0	0	0	05		PRO: Quiet
037	06	05	22	95	1	10729	S11	W52	0	0	0	06	Q	SOL: Eruptive
						10730	S20	E60	0	0	0	06	Q	MAG: Quiet
									0	0	0	06		PRO: Quiet
038	07	06	47	97	10	10729	S11	W66	0	0	0	07	Q	SOL: Eruptive
						10730	S20	E46	0	0	0	07	Q	MAG: Active
						10731	S02	E27	0	0	0	07	Q	PRO: Quiet
						10732	N09	E70	0	0	0	07	E	
039	08	07	62	103	29	10729	S11	W79	0	0	0	08	Q	SOL: Eruptive
						10730	S20	E33	0	0	0	08	Q	MAG: Active
						10731	S02	E14	0	0	0	08	Q	PRO: Quiet
						10732	N09	E57	0	0	0	08	Q	
						10733	S09	E78	0	0	0	08	E	
040	09	08	53	108	34	10730	S20	E20	0	0	0	09	Q	SOL: Eruptive
						10732	N12	E37	0	0	0	09	Q	MAG: Active
						10733	S08	E67	0	0	0	09	E	PRO: Quiet
041	10	09	60	109	22	10730	S21	E09	0	0	0	10	Q	SOL: Eruptive
						10732	N14	E28	0	0	0	10	Q	MAG: Active
						10733	S08	E54	0	0	0	10	Q	PRO: Quiet
						10734	S04	E71	0	0	0	10	Q	
042	11	10	63	114	18	10730	S20	W05	0	0	0	11	Q	SOL: Eruptive
						10732	N17	E17	0	0	0	11	Q	MAG: Quiet
						10733	S08	E40	0	0	0	11	Q	PRO: Quiet
						10734	S04	E57	0	0	0	11	Q	
						10735	S08	E74	0	0	0	11	Q	
043	12	11	73	114	11	10730	S20	W19	0	0	0	12	Q	SOL: Eruptive
						10732	N11	W04	0	0	0	12	Q	MAG: Quiet
						10733	S08	E31	0	0	0	12	Q	PRO: Quiet
						10734	S04	E44	0	0	0	12	Q	
						10735	S08	E60	0	0	0	12	Q	
044	13	12	72	116	5	10730	S20	W32	0	0	0	13	Q	SOL: Eruptive
						10732	N11	W17	0	0	0	13	Q	MAG: Quiet
						10733	S08	E14	0	0	0	13	Q	PRO: Quiet
						10734	S05	E31	0	0	0	13	Q	
						10735	S08	E47	0	0	0	13	Q	
045	14	13	73	116	3	10730	S19	W44	0	0	0	14	Q	SOL: Eruptive
						10732	N12	W30	0	0	0	14	Q	MAG: Quiet
						10733	S09	E01	0	0	0	14	E	PRO: Quiet
						10734	S04	E17	1	0	0	14	Q	
						10735	S09	E34	0	0	0	14	Q	

# A L E R T P E R I O D S

## The International Space Environment Service

### FEBRUARY 2005

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location		Flares			Date of Fcst	Region Fcst(1)	Geoadvice(1)
							Lat	Lon	Opt	M	X			
046	15	14	115	118	5	10730	S19	W57	0	0	0	15	Q	SOL: Eruptive
						10732	N12	W43	0	0	0	15	Q	MAG: Quiet
						10733	S09	W13	0	0	0	15	E	PRO: Quiet
						10734	S05	E04	0	0	0	15	Q	
						10735	S08	E20	0	0	0	15	Q	
047	16	15	69	122	3	10732	N08	W60	0	0	0	16	Q	SOL: Eruptive
						10733	S08	W26	0	0	0	16	Q	MAG: Quiet
						10734	S04	W10	0	0	0	16	Q	PRO: Quiet
						10735	S08	E06	3	0	0	16	Q	
048	17	16	61	113	13	10733	S08	W39	0	0	0	17	Q	SOL: Eruptive
						10734	S04	W23	1	0	0	17	Q	MAG: Quiet
						10735	S07	W06	1	0	0	17	E	PRO: Quiet
049	18	17	51	111	8	10733	S08	W52	0	0	0	18	Q	SOL: Eruptive
						10734	S05	W34	0	0	0	18	Q	MAG: Active
						10735	S10	W18	0	0	0	18	E	PRO: Quiet
050	19	18	46	104	22	10733	S09	W67	0	0	0	19	Q	SOL: Eruptive
						10734	S05	W50	0	0	0	19	Q	MAG: Active
						10735	S09	W32	1	0	0	19	E	PRO: Quiet
051	20	19	51	99	14	10733	S08	W80	0	0	0	20	Q	SOL: Eruptive
						10734	S05	W63	0	0	0	20	Q	MAG: Quiet
						10735	S09	W45	0	0	0	20	E	PRO: Quiet
052	21	20	60	96	11	10733	S08	W93	0	0	0	21	Q	SOL: Quiet
						10734	S05	W76	0	0	0	21	Q	MAG: Quiet
						10735	S09	W58	0	0	0	21	Q	PRO: Quiet
						10736	N13	W50	0	0	0	21	Q	
053	22	21	33	95	8	10735	S09	W71	0	0	0	22	Q	SOL: Quiet
						10736	N13	W63	0	0	0	22	Q	MAG: Quiet
									0	0	0	22		PRO: Quiet
054	23	22	23	92	6	10735	S09	W85	0	0	0	23	Q	SOL: Quiet
						10736	N13	W77	0	0	0	23	Q	MAG: Quiet
									0	0	0	23		PRO: Quiet
055	24	23	54	85	6	10735	S09	W97	0	0	0	24	Q	SOL: Quiet
						10736	N13	W92	0	0	0	24	Q	MAG: Quiet
						10737	S07	W31	0	0	0	24	Q	PRO: Quiet
						10738	S10	E10	0	0	0	24	Q	
056	25	24	17	80	5	10737	S09	W44	0	0	0	25	Q	SOL: Quiet
									0	0	0	25		MAG: Quiet
									0	0	0	25		PRO: Quiet
057	26	25	15	78	13	10737	S11	W59	0	0	0	26	Q	SOL: Quiet
									0	0	0	26		MAG: Active
									0	0	0	26		PRO: Quiet
058	27	26	27	77	11	10737	S11	W72	0	0	0	27	Q	SOL: Quiet
						10739	S04	E52	0	0	0	27	Q	MAG: Active
									0	0	0	27		PRO: Quiet
059	28	27	12	76	10	10739	S04	E38	0	0	0	28	Q	SOL: Quiet
									0	0	0	28		MAG: Active
									0	0	0	28		PRO: Quiet

#### (1) Region Forecast and Flare (SOL) Advice

Q = Quiet (<50% probability of C-class flares)  
 E = Eruptive (C-class flares expected, probability >=50%)  
 A = Active (M-class flares expected, probability >=50%)  
 M = Major (X-class flares expected, probability >=50%)

20  
Feb 05

# ALERT PERIODS The International Space Environment Service

FEBRUARY 2005

---

P = Proton (Proton flares expected, probability >=50%)  
W = Warning (activity levels are expected to increase, but no numerical forecast given)  
/ = No forecast available

## Magnetic (MAG) Geoadvice

'Quiet'  
'Active' conditions expected (A>= 20 or K =4)  
'Minor' storm expected (A>= 30 or K =5)  
'Major' storm expected (A>= 50 or K>=6)  
'Severe' storm expected (A>=100 or K>=7)  
'IP' magstorm in progress (A>= 30 or K>=4)  
'Warning' (activity levels are expected to increase, but no numerical forecast given)  
'/' no forecast available

## Proton (PRO) Geoadvice

'Quiet'  
'Proton' event expected ( 10pfu at > 10 MeV)  
'Major' proton event expected (100pfu at >100 MeV)  
'IP' proton event in progress (>10 MeV)  
'Warning' (activity levels are expected to increase, but no numerical forecast given)  
'/' no forecast available

---

## STRATWARM ALERTS STRATWARM ALERTS Termination of the STRATALERT Reports Stratospheric Research Group, FU Berlin

In the 1960s the stratospheric midwinter warmings were regarded as an exciting and interesting research problem. The observations taken during a warming were scarce but in great demand, and a much desired aim was to launch meteorological rockets when a warming was developing above a station. For this purpose an advisory system was necessary, such as had been established in the international geophysical community for other phenomena, the so-called GEOALERT. Charged by WMO (World Meteorological Organisation) the Stratospheric Research Group of the Freie Universität in Berlin got together with their colleagues of the American Weather Bureau and developed a warning system which was named STRATALERT. It was introduced in 1964 when the IQSY (International Year of the Quiet Sun) began (cf. ALERTING CRITERIA for more information).

The Berlin group was at first responsible for the European space, later for the whole Northern Hemisphere, and issued a STRATALERT report every day during winter, and when needed also a GEOALERT. The alerts were disseminated through the German Weather Service's international net and reached all interested parties everywhere. The STRATALERT reports were an essential source of information about what was going on in the stratosphere, information which at that time would not otherwise have been available to many scientists interested in current conditions. Because of this information it was possible to time experiments, for instance with meteorological rockets, to take place under desired conditions, and local observations could be fitted into and interpreted on the background of a wider field. This information system has served as a basis for decisions made in many large-scale field experiments. A review and classification of stratospheric warmings can be found in SPARC Newsletter No. 15, ( Labitzke and Naujokat, 2000, updated table 1).

The winter, 2003/2004, was the last STRATALERT winter. After 41 years we are sorry to announce that we cannot continue this timely warning system in its old format and we could not find a successor. For those who are interested in STRATALERT messages, we provide access to all available messages via ftp:  
<ftp://strat50.met.fu-berlin.de/pub/stratalert>

Those interested in the daily development of the stratospheric circulation can find some analyses and different stratospheric parameters based on the ECMWF-data here:  
<http://strat-www.met.fu-berlin.de/cgi-bin/winterdiagnostics>.  
The general evaluation is, however, left to the user.

Additional data links are (amongst others) available:

US National Centers for Environmental Prediction (CPC/NCEP):  
<http://www.cpc.ncep.noaa.gov/products/stratosphere>

Japan Meteorological Agency (JMA):  
<http://okdk.kishou.go.jp/products/clisys/STRAT>